### Beltrami County Tower and Wind Energy Conversion System Ordinance Beltrami County Ordinance #35

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#### SECTION 1: INTENT AND PURPOSE

The unique and diverse landscapes of Beltrami County are among its most valuable assets. Destroying these assets risks undermining the very characteristics responsible for our economic vitality and future potential. Protecting these assets will require that location and design of tower facilities be sensitive to, and in scale and harmony with, the aesthetics of Beltrami County. This Ordinance will provide standards for the proper placement and design of tower facilities in order to ensure their compatibility with surrounding aesthetics and development.

The purpose of this Ordinance shall be to establish predictable and balanced regulations that protect the public, health, safety, and general welfare of the county, these regulations are intended to:

- A. Facilitate the provision of telecommunications and wind energy conversion systems services and facilities including commercial wireless telecommunication services in Beltrami County;
- B. Minimize adverse visual effects of towers through careful design and siting standards;
- C. Avoid potential damage to adjacent properties from tower or antenna failure and weather-related occurrences through structural standards, careful siting, and setback requirements;
- D. Encourage the use of existing towers and buildings to accommodate commercial wireless telecommunication service antennas in order to minimize the number of towers needed to serve the county.

The Telecommunication Act of 1996 affirms Local Government's right to control the siting, construction, and modification of cellular and other wireless telecommunication facilities. The permitting process in this Ordinance does not discriminate among providers of functionally equivalent services and does not prohibit the provision of personal wireless services.

Leasing of public buildings, publicly owned structures, public lands, and/or rights-of-way for the purposes of locating wireless telecommunication services facilities and/or equipment is encouraged. In cases where a facility is proposed on County property, specific locations and compensation to the County shall be negotiated in lease agreements between the County and the provider on a case-by-case basis, and shall be subject to all the requirements contained in this Ordinance. Such agreements would not provide exclusive arrangements that could tie up access to the negotiated site(s) or limit competition, and must allow for the possibility of "co-locating" (sharing of facilities) with other providers.

#### SECTION 2: APPLICABILITY

It shall be unlawful for any person to erect, construct, or place any new Tower facility or Wind Energy Conversion System without first receiving appropriate permits from the Beltrami County

Planning and Zoning Department. Tower Facilities and Wind Energy Conversion Systems must comply with all local, state and federal regulations. It shall be unlawful to alter, modify, transform, add to, or change in any way, an existing tower structure or wind energy conversion system without first receiving permits from the Beltrami County Planning and Zoning Department. Addition of antennas and transmission lines shall not require a permit.

The provisions contained herein shall not govern any privately owned non-commercial tower, or the installation of any antenna that is under eighty-five (85) feet in height, or operated by a federally licensed amateur radio station operator, or is used exclusively as a receive only antenna.

#### **SECTION 3: DEFINITIONS**

Amateur Radio Operator: A person holding a written authorization to be the control operator of an amateur radio facility. This authorization shall be in the form of a license or permit issued by the Federal Communications Commission.

Antenna: Any structure or device used for the purpose of collecting or radiating electromagnetic waves including but not limited to directional antennas such as panels, microwave dishes, satellite dishes, and omni-directional antennas such as whip antennas.

Co-Location: The placement of wireless telecommunication antenna by two or more service providers on a tower, building or structure.

Commercial Wind Energy Conversion System: Any WECS designed and operated at a capacity greater than incidental excess of the amount needed for basic residential use, and/or the purpose of such energy generation is intended for commercial sale.

Department: Beltrami County Planning and Zoning Department.

Experimental and Homebuilt WECS: Wind machines that are one of a kind, first attempt machines built by a wind power company or individual.

Guyed Tower: A tower that is supported, in whole or in part, by wires and ground anchors.

Lowest Extension of WECS Blades: The lowest point of the arc created by the rotation of the WECS rotor.

Monopole: A type of tower mount that is self supporting through a single shaft usually constructed of wood, metal or concrete.

Production Phase WECS: Professionally designed wind machines that are built in significant numbers on a continuing basis after testing. Wind machines made from professionally designed kits will be considered production phase WECS.

Search Ring: An area in which a wireless provider is able to locate an antenna of a defined height that will provide the wireless service provider's desired coverage.

Tower: Any pole, wire, structure or combination thereof, including support lines, cables, wires, braces and masts intended primarily for the purpose of mounting antenna or to serve as an antenna, or for the placement of a wind energy conversion system.

Tower Facility(ies): A tower and its appurtenant devices including, but not limited to antennas, buildings, fences, gates and related equipment.

Total Height: The distance between the ground level at the base of a structure and its tallest vertical extension including any attachment thereon.

Wind Energy Conversion System (WECS): Any device such as a wind charger, windmill or wind turbine, which converts wind energy to a form of usable energy, and used for commercial purposes.

#### SECTION 4: CONDITIONAL USE PERMIT REQUIRED FOR TOWERS

All towers, except those excluded in Section 2, require the granting of a conditional use permit by the Beltrami County Planning Commission after completion of the application requirements of this Ordinance.

Towers, except those excluded in Section 2, will not be permitted within 300 feet of a river or stream, within 500 feet of the Mississippi River, or within 1000 feet from the Ordinary High Water Level of a lake.

# THE FOLLOWING SECTIONS APPLY TO TOWERS THAT ARE NOT EXCLUDED IN SECTION 2:

#### SECTION 5: TOWER DESIGN

Proposed or modified towers and antennas shall meet the following design requirements:

- A. Towers and their antennas shall be certified, as installed, by the manufacturer or by a qualified and licensed professional engineer to conform to applicable state and national structural building standards. The towers and their antennas must conform to applicable state structural building standards and/or all other applicable reviewing agencies, including but not limited electrical engineering methods and practices as specified in the National Electrical Code.
- B. Towers shall be monopoles, self-supporting or guyed towers.
- C. Tower Painting Towers shall comply with FAA requirements.
- D. Tower Lighting No tower shall be lighted unless FAA rules require lighting.
  - 1. Strobe lights may be used only when the north sky illumination on a vertical surface at the base of the tower is greater than five (5) foot-candles. Red

obstruction lights or low intensity red strobe lights must be used at all other times.

To reduce the unwanted stray light effect of strobe lighting systems, all medium and high intensity strobe lights must be designed so that the beam spread and effective intensity complies with Federal Aviation Administration Advisory Circular No. 150/5345-43E or any subsequent or replacement Advisory Circular relating to beam spread and effective intensity for strobe lights.

### SECTION 6: ANTENNAS MOUNTED ON ROOFS, WALLS AND EXISTING TOWERS

The placement of antennas on roofs, walls and existing towers may be administratively approved by the County provided that the antennas meets the appropriate requirements of this Ordinance.

- A. Roof mounted antennas shall not exceed twenty (20) feet above the highest point of the roof and shall be set back at least ten (10) feet from the edge of the roof.
- B. Wall or facade mounted antennas may not exceed beyond five (5) feet above cornice line.

#### SECTION 7: TOWER SETBACKS

Towers and all accessory structures or buildings shall conform to the following minimum setback requirements:

A. Towers shall be setback from all property lines an amount equal to the height of the structure, plus ten (10) feet. Towers may be located closer to a property line if the tower is designed and engineered to collapse progressively within the distance between the tower and property line. The conditional use application shall contain written documentation explaining tower construction and possible failure and provide assurance that blowing or falling ice can be contained on the subject property.

### SECTION 8: CO-LOCATION REQUIREMENTS ON TOWERS

All commercial wireless telecommunication towers erected, constructed, or located within the County shall comply with the following requirements:

- A. Documentation of the area to be served including a search ring for the antenna location. A narrative describing a search ring for the request, with not less than a two (2) mile radius clearly explaining why the site was selected, what existing structures were available and why they are not suitable as locations or co-locations.
- B. Documentation that the communications equipment planned for the proposed tower cannot be accommodated on an existing or approved tower or building within the search ring of the service area due to one or more of the following reasons:

- 1. The planned equipment would exceed the structural capacity of the existing or approved tower or building, as documented by a qualified and licensed professional engineer or the tower manufacturer, and the existing or approved tower cannot be reinforced, modified, or replaced to accommodate planned equipment at a reasonable cost;
- 2. The planned equipment would cause interference materially impacting the usability of other existing or planned equipment at the tower or building as documented by a qualified and licensed professional engineer or qualified radio frequency engineer and the interference cannot be prevented at a reasonable cost;
- 3. Existing or approved towers and buildings within the search radius that cannot accommodate the planned equipment at a height necessary to function reasonably as documented by a qualified and licensed professional engineer; or
- 4. Other unforeseen reasons that make it infeasible to locate the planned telecommunications equipment upon an existing or approved tower or building.
- C. Any proposed tower must be designed structurally, electrically, and in all respects, to accommodate both the applicant's antennas and at least two additional antennas if the tower is one hundred (100) feet or more in height or at least one additional antenna if the tower is less than one hundred (100) feet in height. Towers must be designed to allow for future rearrangement of antenna upon the tower and to accept antenna mounted at varying heights.
- D. An agreement stating that the site will be designed for not less than three users with a commitment by the applicant and property owner to co-location, whereby any prohibition of additional users on a tower will be considered a violation of the permit and this Ordinance. The agreement shall also include a statement that any unused or obsolete tower or antenna shall be removed by the property owner and/or applicant. Said agreement shall be signed by the applicant and the property owner and shall be attached to and become a part of the permit.
- E. An agreement stating that the applicant and tower owner commit to co-location at reasonable market prices within 90 days. Any prohibition of additional users on a tower shall be considered a violation of the permit and this Ordinance.
- F. The agreement shall also include a statement that the tower owner and/or applicant shall remove any unused or abandoned tower within 12 months of the tower being vacated. Said agreement shall be signed by the applicant and the property owner and shall be attached to and become a part of the permit.
- G. Telecommunication facility structures permitted under this Ordinance shall allow other users to lease space on the structure up to the maximum number of users allowed by permit. The owner/operator of the facility shall make space available at market rates and with contractual terms standard in the industry within the north-central Minnesota area. The owner/operator may refuse to lease space on the

telecommunication facility structure if the proposed system would cause electromagnetic interference with the system or systems on the existing structure, or the system on the telecommunications facility would cause interference with the proposed system, subject to verification by the County.

H. The response of the owner/operator of existing telecommunication facilities to request for co-location will be considered during the review process under Section 13 of the this Ordinance. Unreasonable responses to requests for co-location shall be grounds for revocation of a conditional use permit granted under this Ordinance.

#### SECTION 9: TOWER AREA FENCING REQUIREMENTS

Tower base, equipment and buildings accessory to a tower shall:

- A. Be architecturally designed to blend in with the surrounding environment.
- B. A 6-foot security fence shall fence in tower base, equipment and buildings. The anchor point for the guy wires shall be fenced. The fence shall encompass the guy anchor and guy wire up to 8 feet from ground level to ensure public safety.

#### SECTION 10: ABANDONED OR UNUSED TOWERS

Abandoned or unused towers and associated facilities shall be removed within 12 months of the cessation of operations at the site unless the Planning and Zoning Director approve a time extension. In the event that a tower is not removed within the 12 months of the cessation of operations at a site, the county may remove the tower and associated facilities and the costs of removal assessed against the property.

#### SECTION 11: SIGNS AND ADVERTISING ON TOWERS

The use of any portion of a tower for signs other than warning or equipment information signs is prohibited.

#### **SECTION 12:** TOWER NOISE

The noise levels associated with any tower facility shall conform to the Minnesota Pollution. Control Agency noise level requirements as listed in MN Rules Chapter 7030.

#### SECTION 13: APPLICATION REQUIREMENTS FOR TOWERS

The Beltrami County Planning & Zoning Office may contract with an independent technical expert to review technical materials submitted by the applicant, and/or to determine if additional information is necessary. The tower facility applicant shall pay the cost of such review and/or independent analysis. In addition to the general requirements for conditional use permit applications; all applications for new towers must also include the following:

- A. Site plan(s) drawn to a scale of one (1) inch equals twenty (20) feet or less, specifying the location of the tower facility, support structures, transmission buildings and/or other accessory structures & uses, accesses, parking areas, fences, signs, lighting, landscaped areas and all adjacent land uses within 250 feet of the tower facility, including all support structures and security fencing.
- B. Map showing the search radius for the antenna location and the proposed broadcast coverage obtained by the tower facility, including a narrative describing a search radius of not less than two (2) miles for the requested site, clearly explaining why the site was selected, identifying and locating landing and takeoff areas of aircraft within the search radius, locating all existing tower facilities, and identifying all other structures that may be potential co-location sites.
- C. Series of pictures of the constructed tower in a digital format as desired by Beltrami County. The pictures shall include a picture of the tower from nearest road, picture of base of tower only showing the bottom 20 feet, picture of the compound area, and picture of each of the guy points, if a guy tower was constructed.
- D. A signed statement on behalf of a carrier or lessee that once the tower is constructed the carrier will be operating the tower within one (1) year after completion.
- E. A copy of a pre-FAA determination or a document that the proposed tower facility has not been found to be a hazard to air navigation under Part 77, Federal Aviation Regulations, or that no compliance with Part 77 is required, and the reasons therefore.
- F. Documentation shall be provided prior to the issuance of a conditional use permit demonstrating that the approved tower has been designed in compliance with the standards set forth in Section 5 of this Ordinance.

### SECTION 14: FACTORS CONSIDERED IN GRANTING CONDITIONAL USE PERMITS FOR TOWERS

The Beltrami County Planning Commission shall consider the following factors in determining whether to issue a conditional use permit for towers. The Board may evaluate each of these criteria on a site-by-site basis with varying levels of preference in determining how the goals of this Ordinance are best served:

- A. Height of the proposed tower facility.
- B. Capacity of the tower structure for additional antenna equipment to accommodate expansion, or to allow for co-location of other provider's equipment.
- C. Proximity of the tower to residential structures and residential district boundaries.
- D. Nature of uses on adjacent and nearby properties.
- E. Surrounding topography.

- F. Present and surrounding tree coverage and foliage.
- G. Design and siting of the tower, with particular reference to design characteristics and location that have the effect of reducing or eliminating visual obtrusiveness.
- H. Proposed ingress and egress.
- I. Availability of suitable existing towers and other structures as discussed in other sections of this ordinance.
- J. Level of adherence to the provisions set forth in Section 1 of this ordinance and the adopted tower policy statement.

### SECTION 15: CONSTRUCTION, OPERATION AND REGISTRATION OF TOWERS

- A. Time limit on tower construction Construction of an approved tower including all accessory structures, including footings and foundations, must be completed within eighteen months following the date of the permit, extendable for an additional six months by the Beltrami County Planning and Zoning Department.
- B. Tower Registration In order ensure compliance with the provisions of this Ordinance, the owner and/or lessee of all existing towers shall, on or before January 1, 2004, provide the following information to Beltrami County:
  - 1. A legal description of the tower site, including GPS coordinates.
  - 2. The name, phone number and address of the tower owner and the landowner.
  - 3. A description of the services (i.e. television, radio, cellular, etc.) that are being broadcast from the tower.
- C. Tower Inspections The following requirements apply to all existing and all future towers in Beltrami County:
  - 1. Tower inspection records shall be kept by the tower owner and/or operator and made available upon request by the Beltrami County Planning and Zoning Administrator.
  - 2. At least once every 12 months a visual inspection from the ground shall be conducted by the tower owner and/or operator. Appropriate repairs shall be made if the tower or any of its appurtenances are noted to be visibly damaged. Additionally, the inspection required under paragraph 3 below shall be conducted if the visible damage is significant or when conducting the inspection inspection, significant questions remain about the structural integrity of the tower.

- 3. At least once every 5 years the tower shall be inspected by an expert who is regularly involved in maintenance, inspection and/or erection of communication towers. This inspection shall include but not be limited to, a visual inspection of tower foundations, structures, guys, and connections for evidence of settling or lateral movement, soil erosion, condition of paint or galvanizing, rust or corrosion, loose or missing bolts, loose or corroded lightning protection connectors, tower plumbness, guy tension, and other material areas or matters relating to the structural integrity of the tower. This inspection shall also be conducted in accordance with any other applicable State or Federal inspection requirements. A copy of this inspection report shall be filed with the Beltrami County Planning & Zoning Administrator.
- 4. In addition to the scheduled inspections, an inspection under paragraph 2 above shall be conducted if the tower or any of its appurtenances are noted at any time to be visibly damaged.

### SECTION 16: EFFECT OF THE ORDINANCE ON EXISTING TOWER FACILITIES

Tower facilities and antennas in Beltrami County and in existence as of the effective date of this ordinance that do not conform to or comply with this ordinance are subject to the following provisions:

- A. Towers may continue in use for the purpose now used and as now existing, but may not be replaced or increased in height without complying in all respects with the provisions contained herein.
- B. If a nonconforming tower is damaged or destroyed due to any reason or cause whatsoever, the tower may be repaired and restored to its former use, location, and physical dimensions upon obtaining a building permit, but without otherwise complying with this Ordinance. Provided, however, that if the cost of repairing or restoring such damaged or destroyed tower would be fifty (50) percent or more, as determined by County, of the cost of purchasing and erecting a new tower of like kind and quality into the former use, physical dimensions and location, then the tower or may not be repaired or restored except in full compliance with this Ordinance.
- C. If a conforming tower is hereafter damaged or destroyed due to any reason or cause whatsoever, the tower may be repaired or restored to its former use, location, and physical dimensions only upon obtaining a conditional use permit from the Beltrami County Planning and Zoning Department.

#### SECTION 17: TERM OF PERMIT

A conditional use permit will remain in effect so long as the conditions contained within the permit are met.

#### SECTION 18: REVOCATION OF PERMIT

The grounds for revocation of a conditional use permit shall be based on a finding that:

- A. The permittee has failed to comply with the conditions of approval imposed;
- B. The facility has not been properly maintained, or
- C. The facility is no longer in use and has not been in use for the previous 24 months.

In the event of revocation of a permit, the tower and all accessory structures must be removed and the site restored to its original condition within 12 months. Failure to do so will result in the County completing the removal and site restoration and the permittee shall pay for county costs or these costs will be assessed against the property.

### THE FOLLOWING SECTIONS (19 THROUGH 23) APPLY TO COMMERCIAL WIND ENERGY CONVERSION SYSTEMS (WECS) AND RELATED FACILITIES:

#### SECTION 19: CONDITIONAL USE PERMIT REQUIRED FOR WECS

All Commercial WECS and supporting facilities must obtain a conditional use permit from the Beltrami County Planning Commission after completion of the application requirements of this Ordinance.

#### SECTION 20: PROHIBITED LOCATION FOR WECS

Commercial WECS are prohibited within 1000 feet from the Ordinary High Water level from any lake, within 500 feet from the Mississippi River, within 300 feet from any river or stream.

#### SECTION 21: WECS PERFORMANCE STANDARDS

All WECS facilities shall at a minimum conform to the following performance standards:

- A. All WECS facilities shall either have a climbing apparatus located no closer than 12 feet to the ground or be un-climbable by design for the first 12 feet.
- B. All Commercial WECS sited on top of buildings shall comply with applicable provisions of the Minnesota State Building Code. Certification of compliance by a Minnesota professional engineer is required.
- C. The interconnection of the WECS with the local electric utility shall comply with all applicable federal and Minnesota state regulations. Individuals proposing a WECS facility must notify their electrical utility in advance of their installation plans.
- D. Clearance between WECS facilities and electrical lines shall be in compliance with the requirements outlined in the most recent edition of the National Electrical Safety Code.

- E. Noise pollution standards established by the Minnesota Pollution Control Agency shall be used to evaluate and regulate all noise from WECS facilities.
- F. Efforts should be made to site WECS facilities to reduce the likelihood of blocking or reflecting television and other communication signals. If signal interference occurs, both the WECS owner and the individual receiving interference shall make reasonable efforts to resolve the problem short of shutting down the wind system.
- G. All Commercial WECS shall be equipped with manual and automatic overspeed controls. The conformance of rotor and overspeed control design and fabrication with good engineering practices shall be certified by the manufacturer's engineering staff or by a Minnesota professional engineer or by an individual with technical training on WECS.
- H. The safety of the design and construction of all Commercial WECS towers shall be certified by the manufacturer's engineering staff, by a Minnesota professional engineer, or by an individual with technical training on WECS. The standard for certification shall be sound engineering practices.
- I. All proposed WECS facilities shall be in compliance with any applicable airport zoning, and shall comply with Federal Aviation Administration notification requirements and any other FAA regulations.
- J. The maximum height of the lowest extent of a Commercial WECS blade shall be 130 feet above ground level, or thirty feet above any obstacles within 300 feet from the WECS tower, whichever is lower.
- K. The minimum height of the lowest extent of a Commercial WECS blade shall be 30 feet above the ground.
- L. Commercial WECS facilities shall have a minimum distance to the parcel and/or recorded easement boundary equal to the height of the tower, including the highest extend of the WECS blade.
- M. Any Commercial WECS that is abandoned or discontinued for a period of 12 months shall be removed from the site at the WECS's owners' expense. Removal includes the complete tower facility including related infrastructures and equipment to ground level not including any base support pad if so desired by the property owner, and restoration to pre-existing vegetative cover. If the discontinued WECS has not been removed from the site within the twelve-month period, the County may complete the removal process and site restoration, the cost of which shall be assessed against the property.
- N. All WECS facilities shall not create stray voltage that will adversely affect adjacent properties.

#### SECTION 22: CONDITIONAL USE PERMIT APPLICATION FOR WECS

Commercial WECS facilities conditional use permit applications must include the following:

- A. Site plan(s) drawn to a scale of one (1) inch equals twenty (20) feet or less, specifying the location of the WECS, support facilities, accesses, parking areas, fences, signs, lighting, landscaped areas and all adjacent land uses within 250 feet of the tower facility, including and security fencing.
- B. Property lines and physical dimensions of the lot, including the location and size of any obstructions within 300 feet that would be pertinent in the consideration of the permit request.
- C. Clearance distances between the farthest extensions of the WECS blades to the property lines.
- D. Locations, dimensions, and types of existing structures and uses on the lot, including the location of all above ground utility lines within a distance equivalent to the total height of the proposed WECS.
- E. Documentation shall be provided prior to the issuance of a conditional use permit demonstrating that the approved tower has been designed in compliance with the standards set forth in Section 21 of this Ordinance.

### SECTION 23: FACTORS CONSIDERED IN GRANTING CONDITIONAL USE PERMITS FOR WECS

The Beltrami County Planning Commission shall consider the following factors in determining whether to issue a conditional use permit to WECS. The Board may evaluate each of these criteria on a site-by-site basis with varying levels of preference in determining how the goals of this Ordinance are best served:

- A. Height of the proposed WECS.
- B. Proximity of the tower to residential structures and residential district boundaries.
- C. Nature of uses on adjacent and nearby properties.
- D. Surrounding topography.
- E. Present and surrounding tree coverage and foliage.
- F. Design and siting of the WECS, with particular reference to design characteristics and location that have the effect of reducing or eliminating visual obtrusiveness.
- G. Proposed ingress and egress to site.

#### SECTION 24: ENFORCEMENT

- A. This ordinance is adopted by reference pursuant to the provisions of Minnesota Statutes Section 394. It is declared unlawful for any person to violate any of the terms or conditions of this ordinance. Violation thereof shall be a misdemeanor.
- B. In the event of a violation or a threatened violation of this ordinance, Beltrami County, in addition to other remedies, may institute appropriate actions or proceedings to prevent, restrain, or abate such violations or threatened violations. The Department may and is empowered to issue cease and desist orders to halt the progress of any on-going violation. When the work has been stopped by the Department for any valid reason whatsoever, it shall not again be resumed until the reason for the work stoppage has been completely satisfied and the cease and desist order lifted.
- C. Any person, firm or corporation who violates, disobeys, omits, neglects or refuses to comply with, or who resists the enforcement of any other provisions of this ordinance shall be guilty of a misdemeanor. Each day that a violation is permitted to exist shall constitute a separate offense. The County Attorney shall have the authority to prosecute any and all violations of this Ordinance.
- D. Any application for a permit that is made after the work is commenced and which requires a permit may be charged up to five (5) times the permit fee. The Planning Commission and/or Board of Adjustment may require correction and/or restoration of the property to its original state before the permit is considered.

#### SECTION 25: INTERPRETATION

In their interpretation and application, the provisions of this ordinance shall be held to be minimum requirements and shall be liberally construed in favor of the governing body and shall not be deemed a limitation or repeal of any other powers granted by State Statutes.

#### SECTION 26: SEVERABILITY

If any section, clause, provision, or portion of this ordinance is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this ordinance shall not be affected thereby.

### SECTION 27: ABROGATION AND GREATER RESTRICTIONS

It is not intended by this ordinance to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance imposes greater restrictions, the provisions of this ordinance shall prevail. All other ordinances inconsistent with this ordinance are hereby repealed to the extent of the inconsistency only.

SECTION 28: ADOPTION OF ORDINANCE

The Beltrami County Telecommunication Tower Ordinance is hereby adopted by the Beltrami County Board of Commissioners on the Zee day of Tune, 2003.

chair

Beltrami County Board of Commissioners

Attest:

Kay Mack

Beltrami County Auditor

Approved as to Form:

Timothy Faver

**Beltrami County Attorney** 

# - LEGAL ADVERTISEMENT Beltrami County Tower and Wind Energy Conversion System Ordinance Beltrami County Ordinance #35 SECTION 1: INTENT AND PURPOSE

The unique and diverse landscapes of Beltrami County are among its most valuable assets. Destroying these assets risks undermining the very characteristics responsible for our economic vitality and future potential. Protecting these assets will require that location and design of tower facilities be sensitive to, and in scale and harmony with, the aesthetics of Beltrami County. This Ordinance will provide standards for the proper placement and design of tower facilities in order to ensure their compatibility with surrounding aesthetics and development.

The purpose of this Ordinance shall be to establish predictable and balanced regulations that protect the public, health, safety, and general welfare of the county, these regulations are intended to:

A. Facilitate the provision of telecommunications and wind energy conversion systems services and facilities including commercial wireless telecommunication services in Beltrami County;

 B. Minimize adverse visual effects of towers through careful design and siting standards;
 C. Avoid potential damage to adjacent properties

C. Avoid potential damage to adjacent properties from tower or antenna failure and weather-related occurrences through structural standards, careful siting, and setback requirements;

D. Encourage the use of existing towers and buildings to accommodate commercial wireless telecommunication service antennas in order to minimize the number of towers needed to serve the county.

The Telecommunication Act of 1996 affirms Local Government's right to control the siting, construction, and modification of cellular and other wireless telecommunication facilities. The permitting process in this Ordinance does not discriminate among providers of functionally equivalent services and does not prohibit the provision of personal wireless services.

Leasing of public buildings, publicly owned structures, public lands, and/or rights-of-way for the purposes of locating wireless telecommunication services facilities and/or equipment is encouraged. In cases where a facility is proposed on County property, specific locations and compensation to the County shall be negotiated in lease agreements between the County and the provider on a case-by-case basis, and shall be subject to all the requirements contained in this Ordinance. Such agreements would not provide exclusive arrangements that could tie up access to the negotiated site(s) or limit competition, and must allow for the possibility of "co-locating" (sharing of facilities) with other providers.

#### SECTION 2: APPLICABILITY

ACCORDANGE OF THE PROPERTY OF

It shall be unlawful for any person to erect; construct, or place any new Tower facility or Wind Energy Conversion System without first receiving appropriate permits from the Beltrami County Planning and Zoning Department. Tower Facilities and Wind Energy Conversion Systems must comply with all local, state and federal regulations. It shall be unlawful to after, modify, transform, add to, or change in any way, an existing tower structure or wind energy conversion system without first

#### **LEGALS**

receiving permits from the Beltrami County Planning and Zoning Department. Addition of antennas and transmission lines shall not require a

The provisions contained herein shall not govern any privately owned non-commercial tower, or the installation of any antenna that is under eighty-five (85) feet in height, or operated by a federally licensed amateur radio station operator, or is used exclusively as a receive only antenna. SECTION 3: DEFINITIONS

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Antenna: Any structure or device used for the purpose of collecting or radiating electromagnetic waves including but not limited to directional antennas such as panels, microwave dishes, satellite dishes, and omni-directional antennas such as whip antennas.

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Lowest Extension of WECS Blades: The lowest point of the arc created by the rotation of the WECS rotor.

MATERIAL PROPERTY OF THE PROPE

Monopole: A type of tower mount that is self supporting through a single shaft usually constructed of wood, metal or concrete.

Production Phase WECS: Professionally designed wind machines that are built in significant numbers on a continuing basis after testing. Wind machines made from professionally designed kits will be considered production phase WECS.

Search Ring: An area in which a wireless provider is able to locate an antenna of a defined height that will provide the wireless service provider's desired coverage.

Tower: Any pole, wire, structure or combination thereof, including support lines, cables, wires, braces and masts intended primarily for the purpose of mounting antenna or to serve as an

pose or mounting amenia or to serve as an antenna, or for the placement of a wind energy conversion system.

Tower actify (les). A power and its appurtenant devices including soften in limited to antennas, buildings lences dates and related equipment.

Total Height: The distance between the ground level at the base of a structure and its tallest verti-

cal extension including any attachment thereon.
Wind Energy Conversion System (WECS): Any device such as arwind charger, windmill or wind turbine, which converts wind energy to a form of usable energy, and used for commercial purposes.

SECTION 4: "CONDITIONAL USE PERMIT

REQUIRED FOR TOWERS All towers, except those excluded in Section 2, require the granting of a conditional use permit by the Beltrami Pounty Planning Commission after completion of the application requirements of this

Towers, except those excluded in Section 2, will not be permitted within 300 feet of a river or stream, within 500 feet of the Mississippi River, or within 1000 feet from the Ordinary High Water Level of a lake

### **LEGALS**

building as documented by a qualified and licensed professional engineer or qualified radio frequency engineer and the interference cannot be prevented at a reasonable cost;

3. Existing or approved towers and buildings within the search radius that cannot accommodate the planned equipment at a height necessary to function reasonably as documented by a qualified and licensed professional engineer; or

4. Other unforeseen reasons that make it infeasible to locate the planned telecommunications equipment upon an existing or approved tower or building.

C. Any proposed tower must be designed structurally, electrically, and in all respects, to accommodate both the applicant's antennas and at least two additional antennas if the tower is one hundred (100) feet or more in height or at least one additional antenna if the tower is less than one hundred (100) feet in height. Towers must be designed to allow for future rearrangement of antenna upon the tower and to accept antenna mounted at varying heights.

D. An agreement stating that the site will be designed for not less than three users with a commitment by the applicant and property owner to colocation, whereby any prohibition of additional users on a tower will be considered a violation of the permit and this Ordinance. The agreement shall also include a statement that any unused or obsolete tower or antenna shall be removed by the property owner and/or applicant. Said agreement shall be signed by the applicant and the property owner and shall be attached to and become a part of the permit.

E. An agreement stating that the applicant and tower owner commit to co-location at reasonable market prices within 90 days. Any prohibition of additional users on a tower shall be considered a violation of the permit and this Ordinance.

F. The agreement shall also include a statement that the tower owner and/or applicant shall remove any unused or abandoned tower within 12 months of the tower being vacated. Said agreement shall be signed by the applicant and the property owner and shall be attached to and become a part of the

G. Telecommunication facility structures permitted under this Ordinance shall allow other users to lease space on the structure up to the maximum number of users allowed by permit. The owner/operator of the facility shall make space available at market rates and with contractual terms standard in the industry within the north-central Minnesota area. The owner/operator may refuse to lease space on the telecommunication facility structure if the proposed system would cause electromagnetic interference with the system or systems on the existing structure, or the system on the telecommunications facility would cause interference with the proposed system, subject to verification by the County.

H. The response of the owner/operator of existing

telecommunication facilities to request for co-location will be considered during the review process under Section 13 of the this Ordinance. Unreasonable responses to requests for co-location shall be grounds for revocation of a condition-

al use permit granted under this Ordinance.
SECTION 9: TOWER AREA FENCING REQUIREMENTS

Tower base, equipment and buildings accessory to a tower shall:

A. Be architecturally designed to blend in with the surrounding environment.

B. A 6-foot security fence shall fence in tower base, equipment and buildings. The anchor point for the guy wires shall be fenced. The fence shall encompass the guy anchor and guy wire up to 8 feet from ground level to ensure public safety.
SECTION 19: ABANDONED OR UNUSED TOW-

ERS

**SAMPLE SHIP** 

SECTION 5: TOWER DESIGN

Proposed or modified towers and entennas shall

meet the following design requirements:

A. Towers and their antennas shall be certified, as installed, by the manufacturer or by a qualified and licensed professional engineer to conform to applicable state and national structural building standards. The towers and their antennas must conform to applicable state structural building standards and/or all other applicable reviewing agencies, including but not limited electrical engineering methods and practices as specified in the National Electrical Code.

B. Towers shall be monopoles, self-supporting or guyed towers.

C. Tower Painting - Towers shall comply with FAA requirements.

D. Tower Lighting - No tower shall be lighted

unless FAA rules require lighting.

1. Strobe lights may be used only when the north sky illumination on a vertical surface at the base of the tower is greater than five (5) foot-candles. Red obstruction lights or low intensity red strobe lights must be used at all other times.

To reduce the unwanted stray light effect of strobe lighting systems, all medium and high intensity strobe lights must be designed so that the beam spread and effective intensity complies with Federal Aviation Administration Advisory Circular No. 150/5345-43E or any subsequent or replacement Advisory Circular relating to beam spread and effective intensity for strobe lights.

SECTION 6: ANTENNAS MOUNTED ROOFS, WALLS AND EXISTING TOWERS

The placement of antennas on roofs, walls and existing towers may be administratively approved by the County provided that the antennas meets the appropriate requirements of this Ordinance.

A. Roof mounted antennas shall not exceed twenty (20) feet above the highest point of the roof and shall be set back at least ten (10) feet from the edge of the roof.

B. Wall or facade mounted antennas may not exceed beyond five (5) feet above comice line. SECTION 7: TOWER SETBACKS

Towers and all accessory structures or buildings shall conform to the following minimum setback requirements:

A. Towers shall be setback from all property lines an amount equal to the height of the structure, plus ten (10) feet. Towers may be located closer to a property line if the tower is designed and engineered to collapse progressively within the distance between the tower and property line. The conditional use application shall contain written documentation explaining tower construction and possible failure and provide assurance that blowing or falling ice can be contained on the subject property

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SECTION 8: CO-LOCATION REQUIREMENTS **ON TOWERS** 

All commercial wireless telecommunication towers erected, constructed, or located within the County shall comply with the following require-

A. Documentation of the area to be served including a search ring for the antenna location. A narrative describing a search ring for the request, with not less than a two (2) mile radius clearly explaining why the site was selected, what existing structures were available and why they are not suitable as locations or co-locations.

B. Documentation that the communications equipment planned for the proposed tower cannot be accommodated on an existing or approved tower or building within the search ring of the service area due to one or more of the following rea-

1. The planned equipment would exceed the structural capacity of the existing or approved tower or building, as documented by a qualified manufacturer, and the existing or approved tower antenna equipment of the tower antenna equip

2. The planned equipment would cause interference materially impacting the usability of other existing or planned equipment at the tower or

man is morana or nies cessation of operations at the site unless the Planning and Zoning Director approve a time In the event that a tower is not extension. removed within the 12 months of the cessation of operations at a site, the county may remove the tower and associated facilities and the costs of removal assessed against the property

SECTION 11: SIGNS AND ADVERTISING ON TOWÈRS

The use of any portion of a tower for signs other

than warning or equipment information signs is prohibited. **SECTION 12: TOWER NOISE** 

The noise levels associated with any tower facility shall conform to the Minnesota Pollution Control Agency noise level requirements as listed in MN Rules Chapter 7030

SECTION 13: APPLICATION REQUIREMENTS

**FOR TOWERS** 

The Beltrami County Planning & Zoning Office may contract with an independent technical expert to review technical materials submitted by the applicant, and/or to determine if additional information is necessary. The tower facility applicant shall pay the cost of such review and/or independent analysis. In addition to the general requirements for conditional use permit applications; all applications for new towers must also include the

A. Site plan(s) drawn to a scale of one (1) inch equals twenty (20) feet or less, specifying the location of the tower facility, support structures, transmission buildings and/or other accessory structures & uses, accesses, parking areas, fences, signs, lighting, landscaped areas and all adjacent land uses within 250 feet of the tower facility, including all support structures and security fenc-

B. Map showing the search radius for the antenna location and the proposed broadcast coverage obtained by the tower facility, including a narrative describing a search radius of not less than two (2) miles for the requested site, clearly explaining why the site was selected, identifying and locating landing and takeoff areas of aircraft within the search radius, locating all existing tower facilities, and identifying all other structures that may be potential co-location sites.

C. Series of pictures of the constructed tower in a digital format as desired by Beltrami County. The pictures shall include a picture of the tower from nearest road, picture of base of tower only showing the bottom 20 feet, picture of the compound area, and picture of each of the guy points, if a guy tower was constructed.

HARRIMEN CONTRACTOR SOMETHING

D. A signed statement on behalf of a carrier or lessee that once the tower is constructed the carrier will be operating the tower within one (1) year after completion.

E. A copy of a pre-FAA determination or a document that the proposed tower facility has not been found to be a hazard to air navigation under Part 77, Federal Aviation Regulations, or that no compliance with Part 77 is required, and the reasons therefore.

F. Documentation shall be provided prior to the issuance of a conditional use permit demonstrating that the approved tower bas been designed in

compliance with the standards set forth in Section 5 of this Ordinance.

SECTION 14: FACTORS CONSIDERED IN GRANTING CONDITIONAL USE PERMITS FOR

The Beltrami County Planning Commission shall consider the following fractors in determining whether to issue a conditional use permit for towers. The Board may available bach of these criteria on a site by site basis with varying levels of preference in determining how the goals of this Ordinance are best served.

A Height of the proceed to the facility.

A. Height of the proposed tower facility

C. Proximity of the tower to residential structures and residential district boundaries.

D. Nature of uses on adjacent and nearby properties. - may be more properties

#### **LEGALS**

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at the applicant and cation at reasonable Any prohibition of hall be considered a Ordinance:

include a statement plicant shall remove ver within 12 months aid agreement shall the property owner. become a part of the

SOCIETY STATES

structures permitallow other users to up to the maximum by permit. The shall make space nd with contractual

E. Surrounding topography.

F. Present and surrounding tree coverage and foliage.

G. Design and siting of the tower, with particular reference to design characteristics and location that have the effect of reducing or eliminating visual obtrusiveness.

H. Proposed ingress and egress.

I. Availability of suitable existing towers and other structures as discussed in other sections of this ordinance

J. Level of adherence to the provisions set forth in Section 1 of this ordinance and the adopted tower policy statement.

SECTION 15: CONSTRUCTION, OPERATION AND REGISTRATION OF TOWERS

A. Time limit on tower construction - Construction of an approved tower including all accessory structures, including footings and foundations, must be completed within eighteen months following the date of the permit, extendable for an additional six months by the Beltrami County Planning and Zoning Department.

B. Tower Registration - In order ensure compliance with the provisions of this Ordinance, the owner and/or lessee of all existing towers shall, on or before January 1, 2004, provide the following information to Beltrami County:

1. A legal description of the tower site, including GPS coordinates.

2. The name, phone number and address of the tower owner and the landowner.

3. A description of the services (i.e. television, radio, cellular, etc.) that are being broadcast from the tower.

C. Tower Inspections - The following requirements apply to all existing and all future towers in Beltrami County:

1. Tower inspection records shall be kept by the tower owner and/or operator and made available upon request by the Beltrami County Planning and Zoning Administrator.

2. At least once every 12 months a visual inspection from the ground shall be conducted by the tower owner and/or operator. Appropriate repairs shall be made if the tower or any of its appurtenances are noted to be visibly damaged. Additionally, the inspection required under paragraph 3 below shall be conducted if the visible damage is significant or when conducting the inspection inspection, significant questions remain

shall make space in with contractual within the north-centowner/operator may a telecommunication cover system would senere with the system could senere with the system of the tower shall be conducted by an expert who is regularly involved in maintenance, anspection and/or erection of common cosed system would senere with the system of the structure, or the actions facility would coposed system, sub-introduced to properly in a structure, or the actions facility would coposed system, sub-introduced to provide the structural integrity of the tower shall be conducted in accordance of the review process in a structural integrity of the tower. This is inspection of covering the relating to the structural integrity of the tower. This conditions is gructured to the structural integrity of the tower shall be conducted in accordance requests for co-local cation of a condition of a conditi about the structural integrity of the tower.

3. At least once every 5 years the tower shall be

ure public safety.

Slons:
D OR UNUSED TOW:
A Towers may continue in use for the purpose now used and as now existing, but may not be

**LEGALS** 

the individual receiving interference shall make reasonable efforts to resolve the problem short of shutting down the wind system.

G. All Commercial WECS shall be equipped with manual and automatic overspeed controls. The conformance of rotor and overspeed control design and fabrication with good engineering practices shall be certified by the manufacturer's engineering staff or by a Minnesota professional engineer or by an individual with technical training on WECS.

H. The safety of the design and construction of all Commercial WECS towers shall be certified by the manufacturer's engineering staff, by a Minnesota professional engineer, or by an individual with technical training on WECS. The standard for certification shall be sound engineering practices.

I. All proposed WECS facilities shall be in compliance with any applicable airport zoning, and shall comply with Federal Aviation Administration notification requirements and any other FAA regulations.

J. The maximum height of the lowest extent of a  $\pi$ Commercial WECS blade shall be 130 feet above ground level, or thirty feet above any obstacles within 300 feet from the WECS tower, whichever is

K. The minimum height of the lowest extent of a = Commercial WECS blade shall be 30 feet above 2 the ground.

L. Commercial WECS facilities shall have a minimum distance to the parcel and/or recorded easement boundary equal to the height of the tower, S including the highest extend of the WECS blade.

M. Any Commercial WECS that is abandoned or discontinued for a period of 12 months shall be removed from the site at the WECS's owners' expense. Removal includes the complete tower facility including related infrastructures and equipment to ground level not including any base support pad if so desired by the property owner, and restoration to pre-existing vegetative cover. If the discontinued WECS has not been removed from the site within the twelve-month period, the County may complete the removal process and site restoration, the cost of which shall be assessed against the property.

N. All WECS facilities shall not create stray volt-

HARRIES AND ARTHUR HARRIES

age that will adversely affect adjacent properties. SECTION 22: CONDITIONAL USE PERMIT APPLICATION FOR WECS

Commercial WECS facilities conditional use per-

The Beltrami County Planning Commission shall consider the following factors in determining whether to issue a conditional use nermit

#### **AFFIDAVIT OF PUBLICATION**

State of Minnesota,

County of Beltrami

SS

DENNIS DOEDEN, being duly sworn, on oath says that he is the Publisher of the Newspaper known as THE PIONEER, and has full knowledge of the facts which are stated below: (A) The newspaper has complied with all of the requirements constituting qualifications as a qualified newspaper, as provided by Minnesota Statute 331A.02, 331A.07, and other applicable laws, as amended. (B) The printed Beltrami County Auditor/Belt. Cty Tower & Wind Energy Conversion System Ordinance which is attached was cut from the columns of said newspaper, and was printed and published once each day, for One successive days; it was first published on Wednesday the 11th day of June 20.03 and was thereafter printed and published on every Wednesday to and including. Wednesday, the 11th, day of June, 20.03 and printed below is a copy of the lower case alphabet from A to Z, both inclusive, which is hereby acknowledged as being the size and kind of type used in the composition and publication of the notice: GARY LEROY NEWELL abcdefghijkimnopgrstuvwxyz NOTARY PUBLIC - MINNESOTA TITLE: Publisher efore me on this RATE INFORMATION 7.30 Lowest classified rate paid by commercial users for comparable space 7.30 (2) Maximum rate allowed by law for the above matter

Rate information is based on the cost of one lower case alphabet.

(3) Rate actually charged for the above

3.65

### 429969

OFFICE OF COUNTY RECORDER
Beltrami County, Minnesota

I hereby certify that this instrument was

filed in this office for record on the 12th

day of June A.D. 20 03 at 11:00

o'cluck A. M. and was duly recorded by 429969

Microfilm No.\_

Ann F. Allen
COUNTRECORDER

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